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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/489,464	01/21/2000	William H. Connor	SUN-P4061-JTF	5882

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PARK, VAUGHAN & FLEMING LLP
508 SECOND STREET
SUITE 201
DAVIS, CA 95616

EXAMINER

WANG, MARY DA ZHI

ART UNIT PAPER NUMBER

3621

DATE MAILED: 05/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/489,464

Applicant(s)

CONNOR, WILLIAM H.

Examiner

Mary Wang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,4,5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-2, 5-10, 12-13, 16-17 and 20-25 are rejected under 35 U.S.C. 102(a) as being anticipated by Nakanishi et al., European Patent 0 903 677 A2.

As to claim 1, Nakanishi teaches a method for providing concurrency control for a policy-based management system that controls resources in a distributed computing system, comprising (column 1 lines 40-50 and column 2 lines 28-50):

- a) receiving a request to perform an operation on a lockable resource from a controller in the distributed computing system (column 5 line 38 – column 6 line 13 and Figs. 1, 22);
- b) wherein the controller sends the request in order to enforce a first policy for controlling resources in the distributed computing system (column 5 line 38 – column 6 line 13 and Figs. 1, 22);
- c) Nakanishi teaches locking means acquires to lock an object, locking object determining means determines the object to be locked, and the object would be registered to the locking status (column 5 line 38 – column 6 line 13 and Figs. 1, 22). These matters taught here are correspondence to the matters of determining whether the controller holds a lock on the lockable resource, allowing the controller to execute the operation on the lockable resource if the controller holds the lock on the lockable resource, allowing the controller to acquire the lock if the controller does not hold the lock on the lockable resource, and allowing the controller to execute the operation on the lockable resource if the controller acquires the lock.

As to claim 2, Nakanishi teaches the first policy is configured to command resources in the distributed computing system to perform actions so that the distributed computing system operates in accordance with a rule that is enforced by the first policy, wherein the rule governs behavior of resources within the distributed computing system (column 5 line 38 – column 6 line 13 and Figs. 1, 22).

As to claim 5, Nakanishi teaches the lockable resource includes a resource within the distributed computing system (column 5 line 38 – column 6 line 13 and Figs. 1, 22).

As to claim 6, Nakanishi teaches the lockable resource includes a second policy for controlling resources in the distributed computing system (Figs. 1, 5, 7, 9, 11, 13 and 22-26).

As to claim 7, the controller includes a client in the distributed computing system is inherent for Nakanishi's system.

As to claim 8, Nakanishi teaches the controller includes the first policy for controlling resources in the distributed computing system (column 5 line 38 – column 6 line 13 and Figs. 1, 22).

As to claim 9, Nakanishi teaches the controller includes a higher level policy for controlling resources in the distributed computing system, and wherein the lockable resource includes a lower-level policy for controlling resources in the distributed computing system (column 7 line 50 – column 8 line 17 and Figs. 5, 7, 9, 23-25).

As to claim 10, Nakanishi teaches allowing the controller to acquire the lock includes allowing the controller to acquire the lock from a resource that allocates locks to controllers (column 5 line 38 – column 6 line 13 and Figs. 1, 22).

Claims 12-13, 16-17 and 20-25 are rejected for the similar reasons as claims 1-2 and 5-10.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi et al., European Patent 0 903 677 A2 in view of Sudhakaran et al., U. S. Patent 6,161,150.

As to claim 3, Nakanishi teaches the method of providing concurrency control comprising lockable resources as discussed above. Nakanishi does not specifically teach throwing an exception if the controller does not hold the lock on the lockable resource and if the controller does not acquire the lock. However, Sudhakaran teach this matter (column 58 lines 63-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of throwing an exception because it would allow the system to perform additional processing as stated by Sudhakaran (abstract).

Claims 14 and 18 are rejected for the similar reason as claim 3.

5. Claims 4, 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi et al., European Patent 0 903 677 A2 in view of Ho, U. S. Patent 5,615,373.

As to claim 4, Nakanishi teaches the method of providing concurrency control comprising lockable resources as discussed above. Nakanishi does not specifically teach the lock held on the lockable resource expires after a pre-specified lease period, unless the lease is renewed within the pre-specified lease period. However Ho teaches this matter (column 13 lines 25-29). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of release the lock after a pre-specified lease period unless the lease is renewed within the pre-specified lease period because it would create flexibility for user to determine how long the resource should be locked.

Claims 15 and 19 are rejected for the similar reason as claim 4.

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6. Claims 11 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi et al., European Patent 0 903 677 A2 in view of Devarakonda et al., European Patent 0 665 495 A2.

As to claim 11, Nakanishi teaches the method of providing concurrency control comprising lockable resources as discussed above. Nakanishi does not specifically teach the lockable resource presents one or more independent locks providing access to independent sub-units of the resource. However, Devarakonda teaches this matter (Fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of independent locks as taught by Devarakonda in the system of Nakanishi because user would be able to lock a particular resource as desired without interference with other sources.

Claim 26 is rejected for the similar reason as claim 11.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mohan et al. (U. S. Patent 5,551,046) discloses a combination of multiple concurrently-executing database management systems which share data storage resources, efficient lock processing for shared data is implemented by hiding from a global lock manager the distinction between transaction-interest and cache-interest locks that are processed at the DBMS level.

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Inquire

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Wang whose telephone number is (703)-305-0084. The examiner can normally be reached on Monday – Thursday from 8:00 AM to 5:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell, can be reached on (703) 305-9768.

The fax phone number for the organization where this application or proceedings is assigned are as follows:

(703) 746-7238 (After Final Communication)

(703) 746-7239 (Official Communications)

(703) 746-7240 (For Status inquiries, draft communication)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-3900.

Mary Wang
Patent Examiner
Art Unit 2161
April 25, 2002



JAMES P. TRAMMELL
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